REMARKS

Claims 1 and 5-11 are pending in the patent application. Claims 2 and 3 are currently canceled without prejudice or disclaimer. Claim 4 is previously canceled without prejudice or disclaimer. Claims 1 and 5 are currently amended. New claim 11 has been added. No new matter has been added.

Dependent claims 2 and 3 are cancelled, and their limitations are incorporated into their base claim, amended independent claim 1. Dependent claim 5 is amended to change its dependency from claim 3 to new claim 11. No new matter is added.

The limitations of canceled claim 4, which were previously inserted into claim 1 by amendment, are currently deleted from claim 1 and are inserted into new claim 11. Dependent claim 5 is amended to change its dependency from canceled claim 3 to new claim 11. No new matter is added.

In the final office action dated March 31, 2005, claims 1-3 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 2,226,491 ("Gustafson"), and claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gustafson in view of eFunda (Objectives of Heat Treatment, 2001, NPL). The Applicant asserts that amended claim 1 contains a limitation not found in either Gustafson or eFunda, and not taught or suggested by either one or the combination of the two. As a result, the Applicant asserts that claim 1 is neither anticipated by the references nor is obvious in view of the references.

Claim 1 is amended to contain the limitation of a spring element having a work piece contact which is annular throughout (original claim 2). This feature is not disclosed in either Gustafson or eFunda. The Gustafson patent shows contact means which are interrupted several times by slots 5, thereby dividing the contact means in a plurality of independent yielding portions 7. This design serves to provide the "digging

in" action of the Gustafson screw. Such digging in could not be provided when having contact means which are annular throughout.

Further, amended claim 1 is amended to include a spring element having a plurality of openings distributed uniformly over its periphery (original claim 3). This feature is not disclosed in the Gustafson patent, as well. Gustafson discloses a plurality of spring elements being separated by recesses extending from the outer periphery of the flange. These recessives do not constitute openings in the sense of claim 1.

The advantage of the screw element according to amended claim 1 is that a spring element is provided which serves to maintain the pre-stressing of the screw connection and thereby to avoid loosening of the screw connection without the risk, that any chips or swarts are produced by digging in actions of formlocking elements of the screw in the counter-face. This is essential for using the screw in connection with electronic circuits or other electric devices.

Further, the screw according to amended claim 1 provides a flat spring characteristic by weakening the spring element with a plurality of openings. This is important because in many applications of such screw elements the screw element has a rather soft counter-face (e.g. aluminium, plastics) requiring flat spring characteristics to maintain the pre-stressing effect. Screw elements with steep spring characteristics would only effect an annular impression in the counter-face, thereby not being in the position to maintain the pre-stressing effect.

The screw element according to amended claim 1 realizes flat spring characteristics without the risk of producing chips and swarts. None of the screws disclosed in the Gustafson patent are able to provide such characteristics. Gustafson even stresses the point, that a digging in action is required for the binding and locking effect according to his screw design. Thus, it is not obvious to one of ordinary skill in the art, when starting from Gustafson, to provide work piece contact means which is annular throughout. Further, the Gustafson screw design would not function with

openings but requires recesses, slots or the like to provide the edges in the periphery of the screw head for the binding and locking effect according to Gustafson.

In summary, the limitations included in amended claim 1 are neither anticipated by the references nor obvious in view of the references, and should be placed in condition for allowance.

Dependent claims 5-11, which are dependent from independent claim 1, include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent claims 5-11 are also in condition for allowance.

CONCLUSION

In view of the amendments and reasons provided above, it is believed that all pending claims are in condition for allowance. The amendments clarify the patentable invention without adding new subject matter. Applicant respectfully requests favorable reconsideration and early allowance of all pending claims.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicant's attorney of record, Michael B. Lasky at (952) 253-4106.

Respectfully submitted,

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